



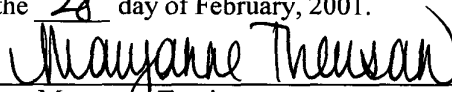
## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Paula M. Vertino  
Serial No: 09/691,763  
Filed: October 18, 2000  
For: TMS1 COMPOSITIONS AND METHODS OF USE  
Examiner: Not Assigned  
Group No.: 1645

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**CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)**

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to Box Sequence, the Commissioner of Patents and Trademarks, Washington, D.C. 20231, on the 28 day of February, 2001.

  
Maryanne Trevisan

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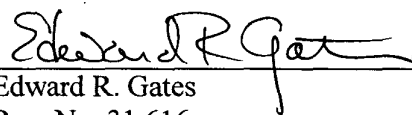
BOX Sequence  
Commissioner of Patents  
Washington, D.C. 20231

**STATEMENT UNDER 37 C.F.R. §1.821(f)**

Sir:

This statement is made pursuant to 37 CFR 1.821(f). Applicant encloses herewith an corrected written copy of the Sequence Listing and a corrected computer readable diskette. Applicant's attorney states that the information recorded in the computer readable form is identical to the written Sequence Listing and that the Sequence Listing contains no new matter.

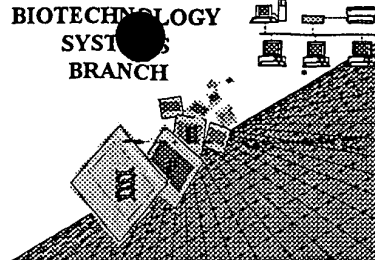
Respectfully submitted,

  
Edward R. Gates  
Reg. No. 31,616  
Wolf, Greenfield & Sacks, P.C.  
600 Atlantic Avenue  
Boston, Massachusetts 02210  
Tel.: 617-720-3500

DATE: 2/28/01  
Attorney's Docket No.: E0355/7003 (ERG/MAT)



## RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/691,763

Source: OIP

Date Processed by STIC: 10/27/2000

RECEIVED

MAR 13 2001

TECH CENTER 1600/2000

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin30help@uspto.gov](mailto:patin30help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER  
VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND  
TRADEMARK OFFICE WEBSITE. SEE BELOW:

### Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

RAW SEQUENCE LISTING                      DATE: 10/27/2000  
 PATENT APPLICATION:    US/09/691,763        TIME: 10:01:33

Input Set : A:\E03557003.txt  
 Output Set: N:\CRF3\10272000\I691763.raw

Does Not Comply  
 Corrected Diskette Needed.

4 <110> APPLICANT: Vertino, Paula M.  
 6 <120> TITLE OF INVENTION: TMS1 Compositions and Methods of Use  
 9 <130> FILE REFERENCE: E0355/7003/ERG/MAT  
 11 <140> CURRENT APPLICATION NUMBER: US/09/691,763  
 11 <141> CURRENT FILING DATE: 2000-10-18  
 11 <150> PRIOR APPLICATION NUMBER: US 60/159,975  
 12 <151> PRIOR FILING DATE: 1999-10-18  
 14 <160> NUMBER OF SEQ ID NOS: 27  
 16 <170> SOFTWARE: FastSEQ for Windows Version 3.0

# ERRORED SEQUENCES

190 <210> SEQ ID NO: 5  
 191 <211> LENGTH: 339  
 192 <212> TYPE: DNA  
 193 <213> ORGANISM: Homo Sapiens  
 195 <220> FEATURE:  
 196 <221> NAME/KEY: CDS  
 197 <222> LOCATION: (67)...(339)  
 199 <400> SEQUENCE: 5  
 200 ccgacttctt cctggtcggc ggctgcagcg gggtagcgcg cggcagcgcc cggggatcct 60  
 201 ggagcc atg ggg cgc gcg cgc gac gcc atc ctg gat gcg ctg gag aac 108  
 202 Met Gly Arg Ala Arg Asp Ala Ile Leu Asp Ala Leu Glu Asn  
 203 1 5 10  
 205 ctg acc gcc gag gag etc aag aag ttc aag ctg aag ctg ctg tgc gtg 156  
 206 Leu Thr Ala Glu Leu Lys Lys Phe Lys Leu Lys Leu Leu Ser Val  
 207 15 20 25 30  
 209 ccg ctg cgc gag gcc tac ggg cgc atc ccg cgg gcc gcg ctg ctg tcc 204  
 210 Pro Leu Arg Glu Gly Tyr Gly Arg Ile Pro Arg Gly Ala Leu Leu Ser  
 211 35 40 45  
 213 atg gac gcc ttg gac etc acc gac aag ctg gtc agc ttc tac ctg gag 252  
 214 Met Asp Ala Leu Asp Leu Thr Asp Lys Leu Val Ser Phe Tyr Leu Glu  
 215 50 55 60  
 217 acc tac gcc gcc gag etc acc gct aac gtg ctg cgc gac atg gcc ctg 300  
 218 Thr Tyr Gly Ala Glu Leu Thr Ala Asn Val Leu Arg Asp Met Gly Leu  
 219 65 70 75  
 221 cag gag atg gcc ggg cag ctg cag gcg gcc acg cac cag g 340  
 222 Gln Glu Met Ala Gly Gln Leu Gln Ala Ala Thr His Gln  
 E--> 223 80 85 90

245 <210> SEQ ID NO: 7  
 246 <211> LENGTH: 58  
 247 <212> TYPE: DNA  
 248 <213> ORGANISM: Homo Sapiens  
 250 <220> FEATURE:  
 251 <221> NAME/KEY: CDS  
 252 <222> LOCATION: (3)...

Input Set : A:\E03557003.txt  
Output Set: N:\CRF3\10272000\I691763.raw

```

254 <400> SEQUENCE: 7
255 gc tct gga gcc gcg cca gct ggg atc cag gcc cct cct cag tcg gca 47
256 Ser Gly Ala Ala Pro Ala Gly Ile Gln Ala Pro Pro Gln Ser Ala
257 1 5 10 15
259 gcc aag cca g
E--> 260 Ala Lys Pro 57
685 <210> SEQ ID NO: 26
686 <211> LENGTH: 414 405
687 <212> TYPE: DNA
688 <213> ORGANISM: Homo Sapiens
690 <220> FEATURE:
691 <221> NAME/KEY: CDS
692 <222> LOCATION: (75)...(404)
694 <400> SEQUENCE: 26
695 ccacgcgtcc gaattcctcc tggctcggcgg ctgcagcggg gtgagcggcg gcagcggcgg 60
696 gggatcctgg agcc atg ggg cgc gcg cgc gac gcc atc ctg gat gcg ctg 110
697 Met Gly Arg Ala Arg Asp Ala Ile Leu Asp Ala Leu
698 1 5 10
700 gag aac ctg acc gcc gag gag ctc aag aag ttc aag ctg aag ctg ctg 158
701 Glu Asn Leu Thr Ala Glu Glu Leu Lys Lys Phe Lys Leu Lys Leu Leu
702 15 20 25
704 tcg gtg ccg ctg cgc gag gcc tac ggg cgc atc ccg cgg gcc gcg ctg 206
705 Ser Val Pro Leu Arg Glu Gly Tyr Gly Arg Ile Pro Arg Gly Ala Leu
706 30 35 40
708 ctg tcc atg gac gcc ttg gac ctc acc gac aag ctg gtc agc ttc tac 254
709 Leu Ser Met Asp Ala Leu Asp Leu Thr Asp Lys Leu Val Ser Phe Tyr
710 45 50 55 60
712 ctg gag acc tac gcc gcc gag ctc acc gct aac gtg ctg cgc gac atg 302
713 Leu Glu Thr Tyr Gly Ala Glu Leu Thr Ala Asn Val Leu Arg Asp Met
714 65 70 75
716 gcc ctg cag qag atg gcc ggg cag ctg cag gcg gcc acg cac cag gcc 350
717 Gly Leu Gln Glu Met Ala Gly Gln Leu Gln Ala Ala Thr His Gln Gly
718 80 85 90
720 tct gga gcc gcg cca gct ggg atc cag gcc cct cct cag tcg gca gcc 398
721 Ser Gly Ala Ala Pro Ala Gly Ile Gln Ala Pro Pro Gln Ser Ala Ala
722 95 100 105
724 aag cca g 405
725 Lys Pro
E--> 726 110

```

*See next page for more errors*

<210> 23  
 <211> 171  
 <212> PRT  
 <213> Rattus Norvegicus

<400> 23  
 Phe Lys Ile Lys Leu Leu Thr Ala Pro Val Arg Glu Gly Tyr Gly Arg  
 1 5 10 15  
 Ile Pro Arg Gly Ala Leu Leu Gln Met Asp Pro Ile Asp Leu Thr Asp  
 20 25 30  
 Lys Leu Val Xaa Tyr Tyr Leu Glu Gly Tyr Gly Leu Glu Leu Thr Met  
 35 40 45  
 Thr Val Leu Arg Asp Met Gly Ile Gln Glu Leu Ala Glu Gln Leu Gln  
 50 55 60  
 Lys Ile Met Glu Glu Ser Gly Ala Val Ala Thr Ala Thr Ser Val Pro  
 65 70 75 80  
 Ala Gln Gly Thr Ala Arg Thr Glu His Phe Val Asp Gln His Arg Gln  
 85 90 95  
 Ala Leu Ile Ala Arg Val Thr Glu Val Asp Gly Leu Leu Asp Ala Leu  
 100 105 110  
 Tyr Gly Asn Val Leu Thr Glu Gly Gln Tyr Gln Ala Val Arg Ala Glu  
 115 120 125  
 Thr Thr Asn Gln Asn Lys Met Arg Lys Leu Phe Ser Phe Ala Pro Ala  
 130 135 140  
 Trp Asn Leu Thr Cys Lys Asn Leu Phe Leu Glu Ala Leu Arg Gln Thr  
 145 150 155 160  
 Gln Pro Tyr Leu Val Thr Asp Leu Glu Gln Ser  
 165 170

see  
 item 10  
 on Enov  
 summary  
 sheet

FYI

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY  
PATENT APPLICATION: US/09/691,763

DATE: 10/27/2000  
TIME: 10:01:35

Input Set : A:\E03557003.txt  
Output Set: N:\CRF3\10272000\I691763.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No  
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:223 M:252 E: No. of Seq. differs, <211>LENGTH:Input:339 Found:340 SEQ:5  
L:260 M:361 W: Invalid Split Codon, Sequence data for SEQ ID#: 7  
L:260 M:252 E: No. of Seq. differs, <211>LENGTH:Input:58 Found:57 SEQ:7  
L:306 M:361 W: Invalid Split Codon, Sequence data for SEQ ID#: 9  
L:527 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:22  
L:527 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:22  
L:559 M:361 W: Invalid Split Codon, Sequence data for SEQ ID#: 22  
L:575 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:23  
L:575 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:23  
L:575 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:23  
L:575 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:23  
L:575 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:23  
L:726 M:252 E: No. of Seq. differs, <211>LENGTH:Input:414 Found:405 SEQ:26